

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Cancelled)
2. (Currently Amended) The process of claim [[1]] 32 wherein said olefins having at least 12 carbon atoms have an average of from 0.8 to 1.3 C<sub>1</sub>-C<sub>3</sub> alkyl branches per carbon chain.
3. (Cancelled)
4. (Currently Amended) The process of claim [[1]] 32 wherein said olefinic hydrocarbon mixture comprises at least 20% by weight of said mono-olefin oligomers.
5. (Cancelled)
6. (Currently Amended) The process of claim [[1]] 32 wherein said mono-olefin oligomers comprise from about 50% to about 98% by weight of olefins having less than or equal to 12 carbon atoms and from about 2% to about 50% by weight of olefins having more than 12 carbon atoms.
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Currently Amended) The process of claim [[1]] 32 wherein said olefinic hydrocarbon mixture also contains linear alpha-olefins containing at least 10 carbon atoms.
11. (Currently Amended) The process of claim [[1]] 32 wherein said feedstock also comprises up to 80wt% of paraffins.

12. (Cancelled)
13. (Currently Amended) The process of claim [[12]] 32 wherein said molecular sieve is selected from MCM-22, PSH-3, SSZ-25, ERB-1, ITQ-1, ITQ-2, MCM-36, MCM-49 AND MCM-56.
14. (Cancelled)
15. (Currently Amended) The process of claim [[12]] 32 wherein said alkylation conditions include a temperature of from 100°C to about 350°C, a pressure of about 1 to about 25 atmospheres, a WHSV of about 0.5 hr<sup>-1</sup> to about 100 hr<sup>-1</sup> and an aromatic compound to olefinic hydrocarbon mixture mole ratio of about 1:1 to about 20:1.
16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Currently Amended) The process of claim [[16]] 32 wherein said alkylation conditions include a temperature of from about -10°C to about 50°C, a pressure of from about 1.0 to about 5.0 atmospheres, a feed weight hourly space velocity (WHSV) of from about 0.2hr<sup>-1</sup> to about 10 hr<sup>-1</sup> and an aromatic compound to olefinic hydrocarbon mixture mole ratio of from about 1:1 to about 15:1.
22. (Currently Amended) The process of claim [[1]] 32 wherein said aromatic compound is selected from the group consisting of benzene and toluene.
- 23-31 (Cancelled)
32. (Currently Amended) A process for preparing an alkylaromatic hydrocarbon composition comprising the steps of:

- (a) oligomerizing an olefin selected from propylene, n-butene and mixtures thereof, over a catalyst comprising ZSM-23 and a surface deactivating agent, to form an oligomerization product comprising at least 95% by weight of mono-olefin oligomers of the empirical formula:



wherein n is greater than or equal to 10, wherein said mono-olefin oligomers comprise at least 20% by weight of olefins having at least 12 carbon atoms and said olefins having at least 12 carbon atoms and an average of from 0.8 to 2.0 C<sub>1</sub>-C<sub>3</sub> alkyl branches per carbon chain;

- (b) contacting the oligomerization product and an aromatic compound under alkylation conditions with an aromatic alkylation catalyst comprising an MCM-22 family molecular sieve having an X-ray diffraction pattern including d-spacing maxima at 12.4±0.25, 6.9±0.15, 3.57±0.07 and 3.42±0.07 Angstroms ~~selected from a molecular sieve of the MCM-22 family,~~

wherein the oligomerization product is not subject to any pretreatment other than to remove the surface deactivating agent prior to the contacting step.

33. (Cancelled)